



Who Is Your “Wilson?”

Building An Apple IT Coalition

Dr. Chris Hart - Enterprise Apple Systems Administrator @ Florida State University



@chart



github.com/christopherhart

Slides, resources, and links are available now at:

github.com/christopherhart/PSU2024

2024
MACADMINS
CONFERENCE

We will cover:

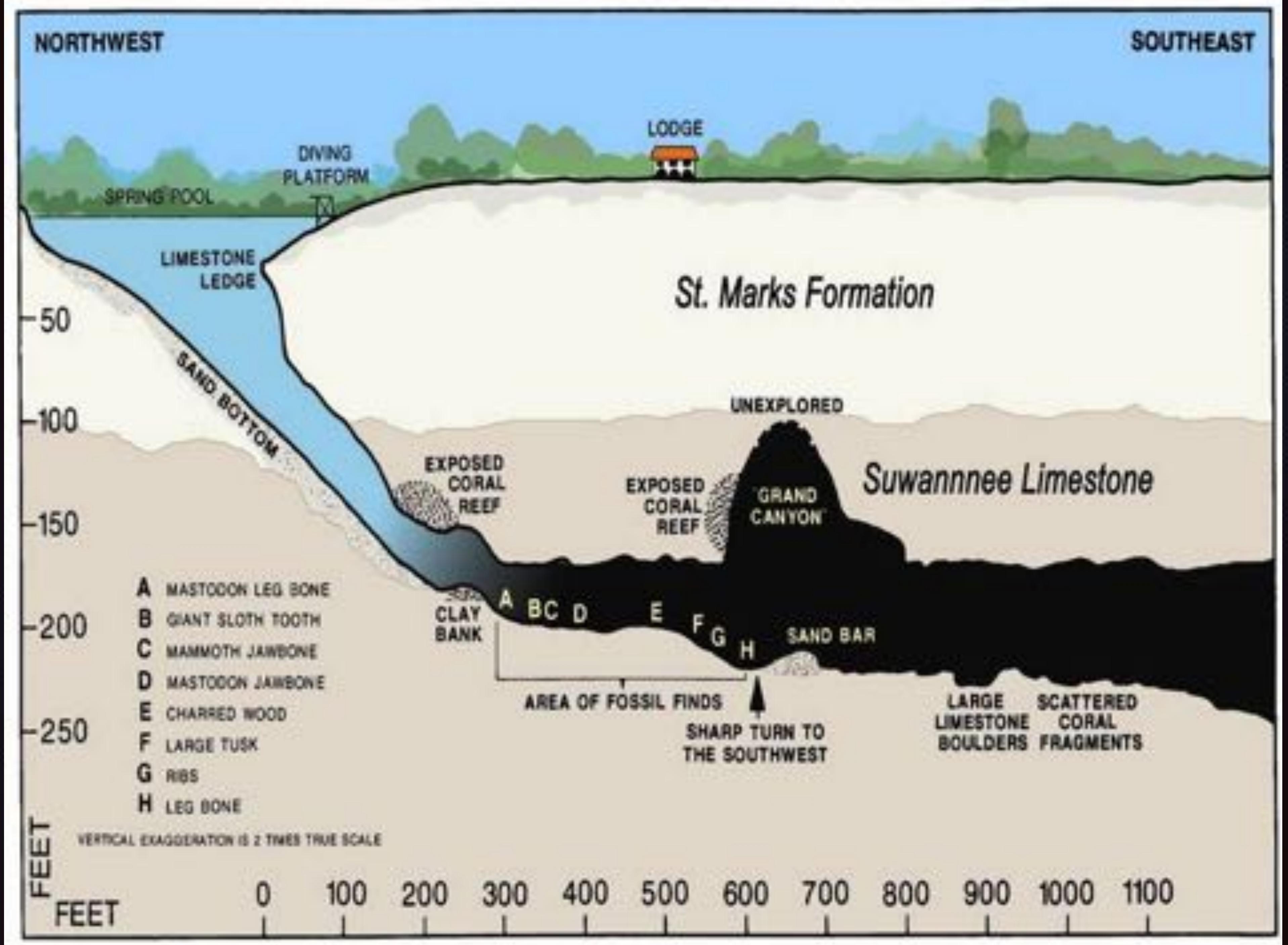
- The First Twelve Years (2000-2012)
- The Great Awakening (2013-2020)
- The Year of MDM (2021)
- The Present And Future (2024-)



Wakulla Springs - Mysterious Waters

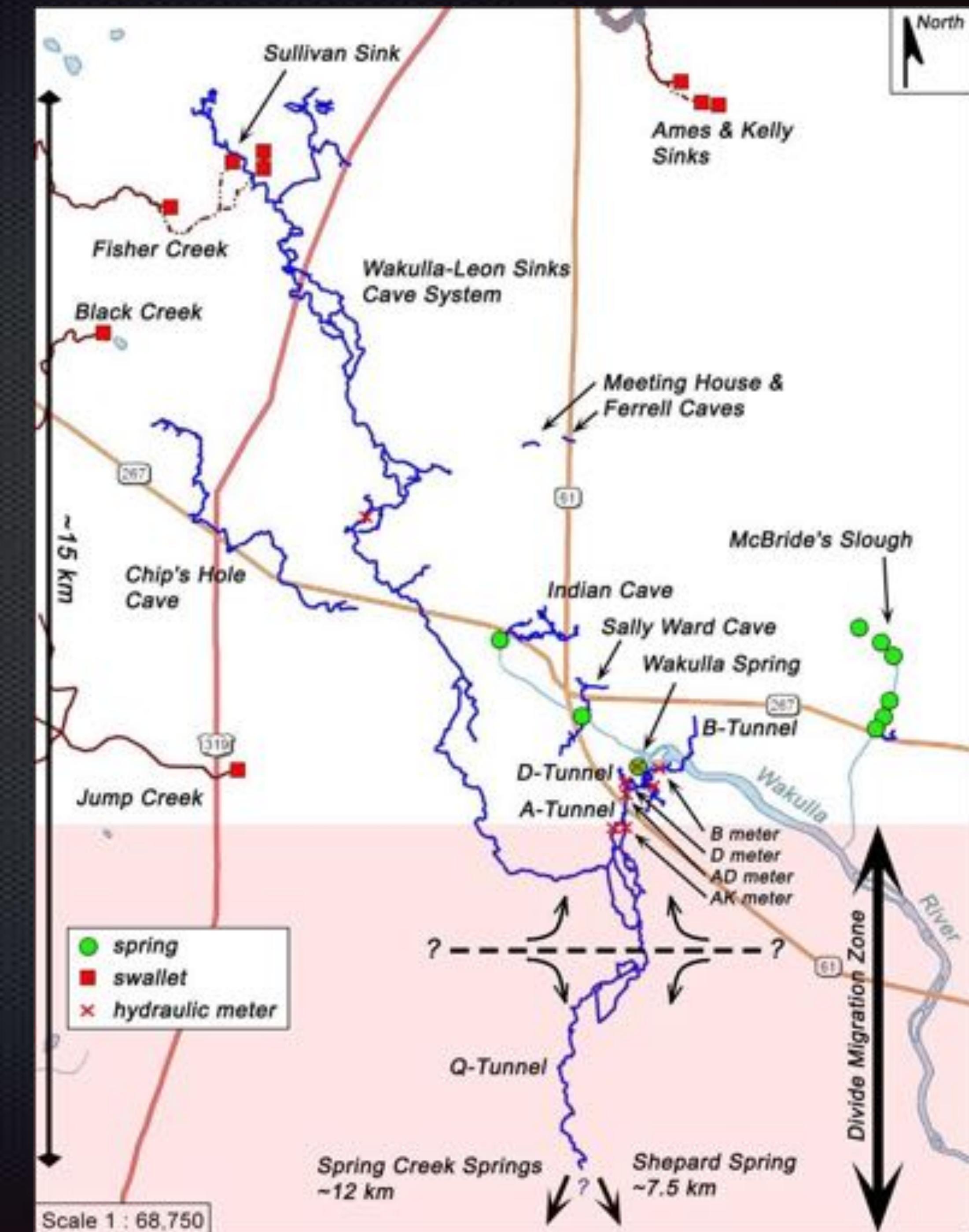






Wakulla Springs

- 38 Miles of underwater caves have been mapped



Mastodon

- “Herman” - Skeleton found at Wakulla Springs



M-G-M
The MGM logo

TARZAN'S SECRET TREASURE



—JOHNNY
WEISSMULLER

Maureen O'SULLIVAN

John SHEFFIELD
Lionel OWEN
Barry FITZGERALD
Tom CONWAY
Doris DORN

Screenplay by RICHARD THOMAS
Directed by A. E. THOMAS



A METRO-GOLDWYN-MAYER MASTERPIECE REPRINT



TERROR STALKS THE
CITY'S
STREETS!

THE CREATURE
WALKS AMONG US

ALL NEW
UNDERWATER
THRILLS!

JEFF MORROW • REX REASON • LEIGH SNOWDEN

— GREGG PALMIRE • MAURICE MANSON

— 1955 — UNIVERSAL PICTURES — 100 MINUTES — COLOR — 70MM



AIRPORT'77



What Do You Do When You Feel Like You're All Alone Doing Apple Support?



The First Twelve Years (2000-2012)

What Do You Do When You Feel Like You're All Alone Doing Apple Support?

- Early on I had to tell the FSU President that his hard drive in his Mac laptop had died and we had no backup.
- Performed a lot of support via Apple Remote Desktop.
- I was only able to attend one “free” Apple authorized training class offered in South Florida over a 12 year period.

The First Twelve Years (2000-2012)

What Do You Do When You Feel Like You're All Alone Doing Apple Support?

- I probably joined the MacEnterprise listserv at some point during the decade as it had started in November 2004.
(Richard Glaser posted second ever message)
- Lurked in the Internet Relay Chat (IRC) Apple world.
- Completed my Ph.D in 2008.

The First Twelve Years (2000-2012)

Initial munki-dev Posting - (January 2009)

Workflow example

3 views



gregneagle@mac.com

to munk...@googlegroups.com

Jan 15, 2009, 3:19:42 PM



Let's try again from the right email address:

I've posted a workflow example on the wiki for the munki project:

<http://code.google.com/p/munki/wiki/WorkflowExample>

It's rather long, but hopefully should get the basic concepts across.

-Greg

What Do You Do When You Feel Like You're All Alone Doing Apple Support?

- First step towards building a coalition occurred early in 2009.
- Information Technology Partnership Program (ITAPP) @ Florida State University.
- Early in 2009 I was asked to fill in and get the Apple IT issues addressed in a primarily macOS department.

The First Twelve Years (2000-2012)







What To Do When On Boarding A Department & Building Your Coalition

- Perform an IT assessment.
- Provide the IT assessment results to the dean or director.
- Use the IT assessment results to base your future decisions (i.e., identify the “low hanging fruit”).

The First Twelve Years (2000-2012)

What Do You Do When You Feel Like You're All Alone Doing Apple Support?

- Next step towards building a coalition occurred in 2009.
- Math department approached our classroom and labs group to inquire about switching from small form factor Windows devices to macOS devices.
- Resulting in the establishment of 300 iMacs that power our Math “testing” environment on campus.

The First Twelve Years (2000-2012)

Tribute To Charles Edge

The complete guide
to Mac OS X administration

- Charles passed away April 2024.
- 1st edition book published 10/29/2009.
- 500 page guide of everything you ever wanted to know about being an Enterprise Mac Admin.



Enterprise Mac Administrator's Guide

Charles S. Edge Jr | Beau Hunter | Zack Smith

Apress®

What do you do when you feel like you're on a deserted IT island with only a volleyball?

- Invite people to the IT island.



FSU Mac User Group (MUG)

- Organized and started hosting a monthly campus-wide MUG meeting in 2010.
- In person until pandemic then went virtual monthly. One or two in person meetings now a year.
- Meeting time - First Friday of the month @ 10am.



Original iPad - (April 3, 2010)



The Original iPad

ANNOUNCED:
Jan. 27, 2010

RELEASED: April 3, 2010

KEY FEATURES:
9.7-inch 1024x768
screen; 1GHz A4
processor; 10-hour
battery

PRICE: \$499

What Do You Do When You Feel Like You're All Alone Doing Apple Support?

- Sometime in 2010 we suffered a macOS IT intrusion.
- Mac Pro Tower in the department I had assisted prior was compromised via unsecured SSH port; via missing 2 year old Microsoft Office security update; and dictionary attack.
- DDoS attack from this one Mac took down the entire campus network for probably 6 hours.

The First Twelve Years (2000-2012)

iPad2 - (March 11, 2011)



The iPad 2

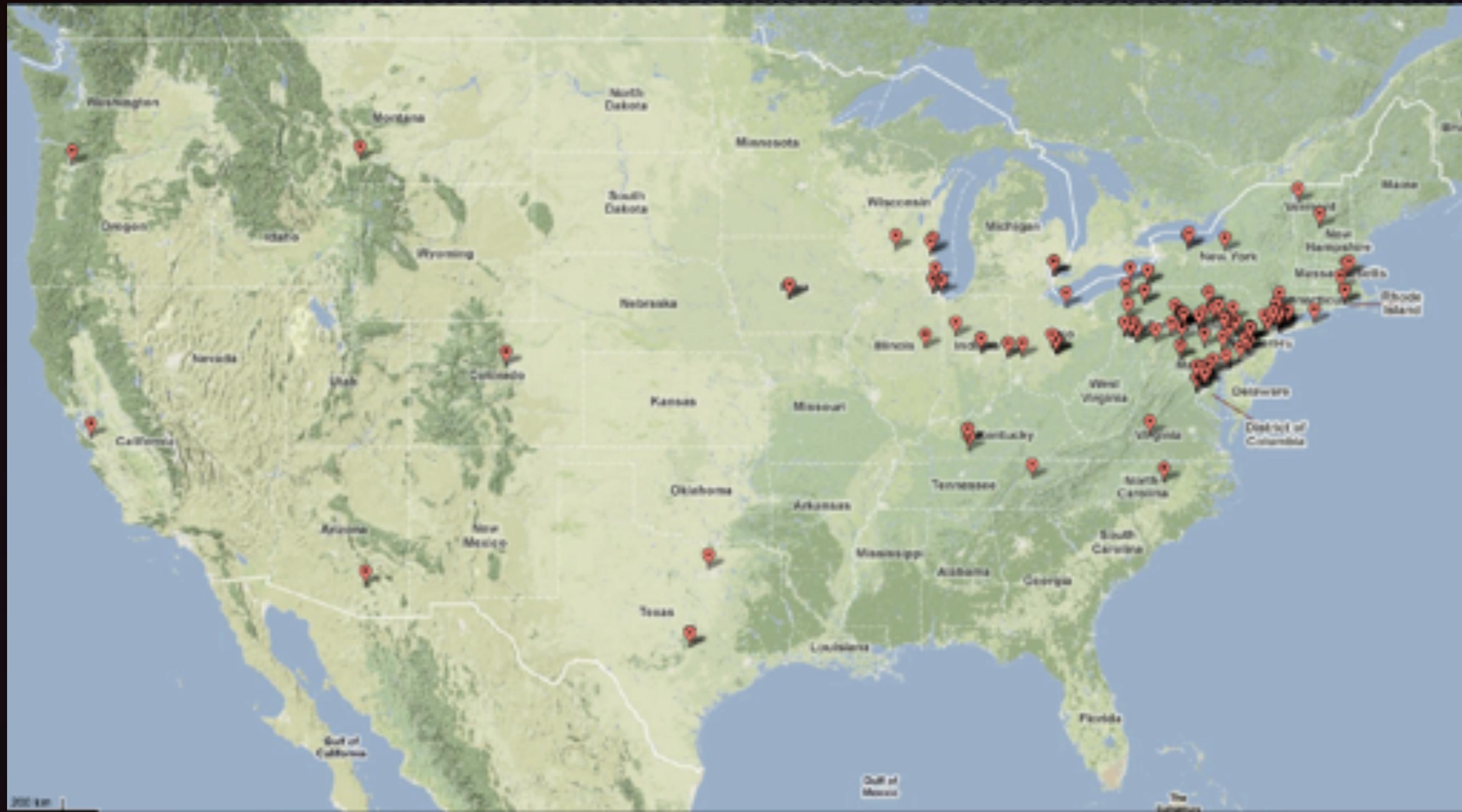
ANNOUNCED: March 2, 2011

RELEASED: March 11, 2011

FEATURES: Still camera and video recording; faster processor; thinner and lighter

PRICE: \$499

Welcome - PSU MacAdmins 2011

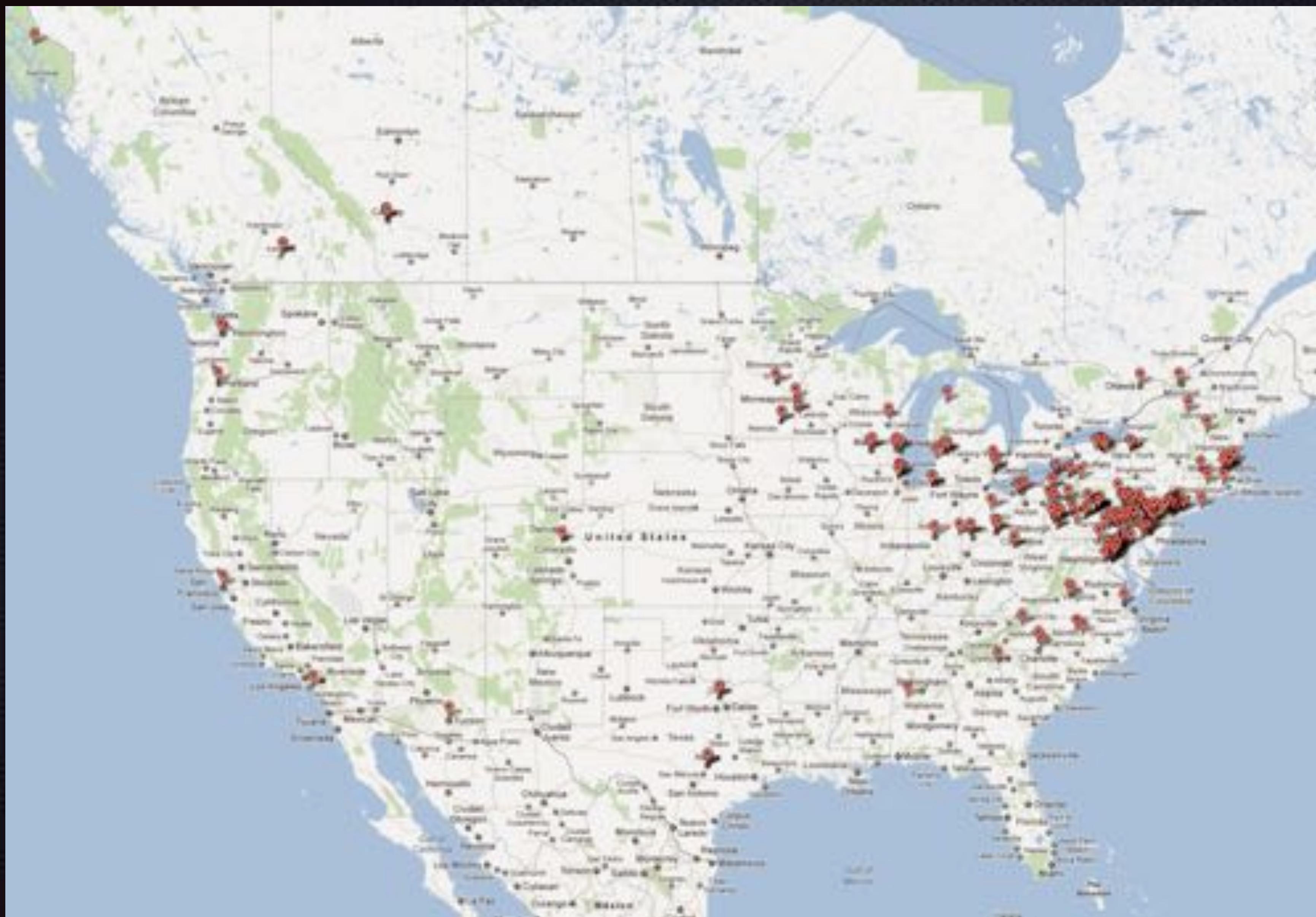


Open Directory (OD)

- Setup 2 MacMini's in a Sonnet rack.
- Established our first Open Directory environment.
- We were doing MCX with a primary and secondary OD.



Welcome - PSU MacAdmins 2012



Welcome - PSU MacAdmins 2012

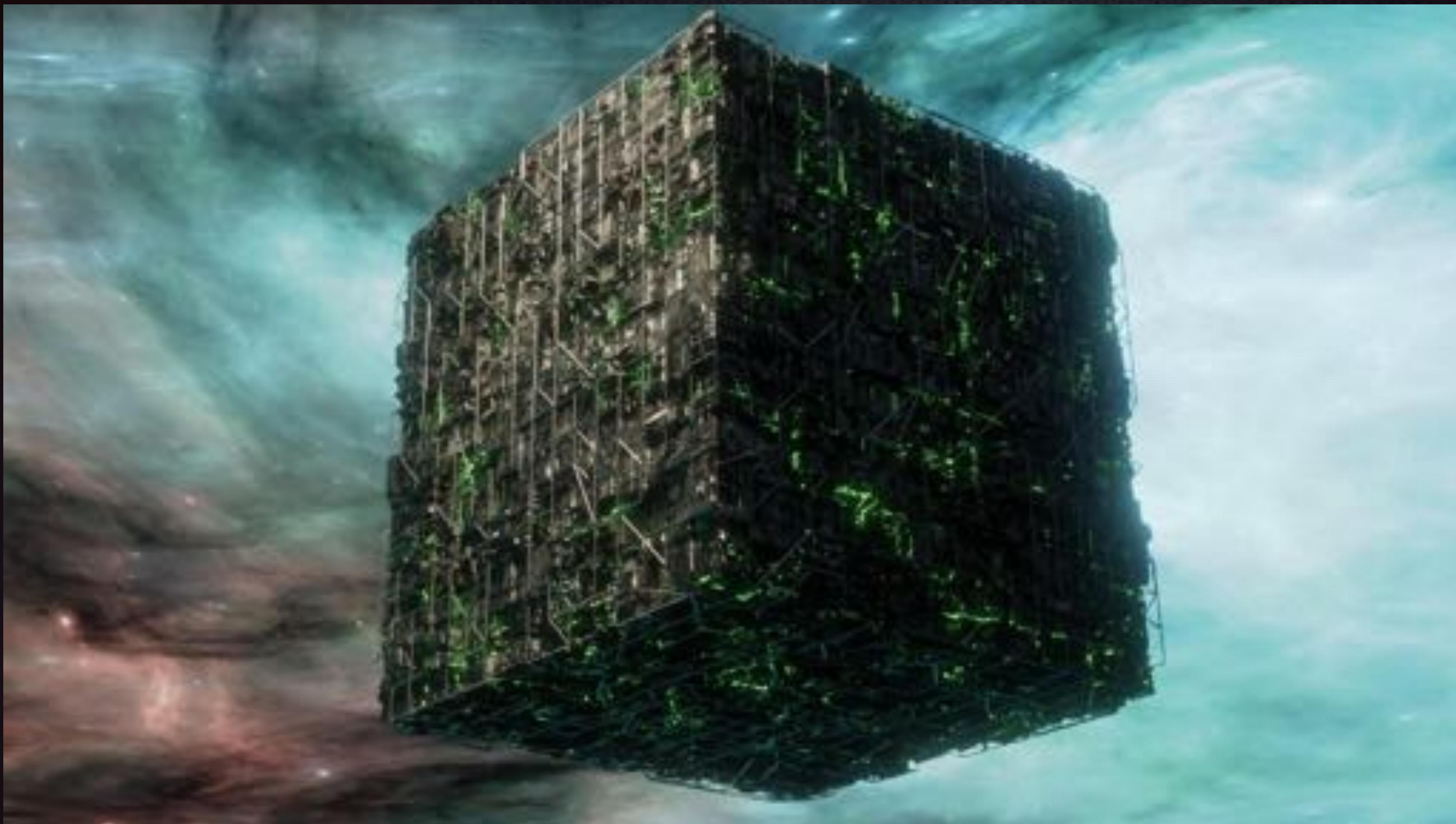


What Do You Do When You Feel Like You're All Alone Doing Apple Support?

- Sometime in 2012 we suffered another set back.
- We had been fostering a relationship with a large Apple department only to have a few central IT members attempt to tell the department how to spend their IT budget.
- This caused the department to walk away and avoid central IT for 3 years.

The First Twelve Years (2000-2012)

Resistance is futile.



You will be assimilated.

Resistance is futile.



You will be assimilated.*

*See future slide for possible exception

DeployStudio



munki

- Started testing about 2 weeks before the 2013 PSU MacAdmins.
- I used a spare 2010 MacMini to host our munki repo.
- I couldn't wrap my head around how to scope out our munki manifest structure.



PSU MacAdmins 2013

PENNSTATE



MACADMINS
CONFERENCE
2013

Welcome - PSU MacAdmins 2013



Joe Wppard



```
#wife {  
right: 100%;
```



Samuel Keeley



Security: Locking down OS X without locking up users

Slides & Video on PSU Resources Site From 2013

Samuel Keeley

“Power Users” group

- Some users should have additional rights, while others should not.
- Create group
 - `dseditgroup -o create -r "Power Users" powerusers`
- Add user to group
 - `dseditgroup -o edit -a teacher -t user powerusers`
 - Don't forget to add administrators group!
 - `dseditgroup -o edit -a admin -t group powerusers`

Samuel Keeley

/etc/authorization

Slides & Video on PSU Resources Site From 2013

Andrina Kelly - jamf Nation 2013 User Conference

The image shows a video player interface. On the left, there is a dark gray sidebar containing two speaker profiles: Andrina Kelly (top) and Jonah Klevesahl (bottom). Andrina Kelly is identified as a Senior Systems Administrator at Bell Media. Jonah Klevesahl is identified as a Senior Account Executive at JAMF Software. Below these profiles is the JAMF NATION user conference logo. To the right of the sidebar is a large video frame showing Andrina Kelly speaking. The video frame has a dark overlay with the Bell Media and JAMF software logos at the top. At the bottom of the video frame, there is a progress bar showing the video is 1:03 / 53:47. A set of control icons is visible at the very bottom of the screen.

Andrina Kelly - jamf 2013

JNUC2013 / Users Do Your Job / 

 andrina Update README

Name	Last commit message
 ..	
 MakeMeAdmin	Update README
 ChangeComputerName.sh	More files added
 IgnoreVolumeOwnership.sh	no message
 Users Do Your Work PDF.pdf	PDF from keynote presented at JNUC 2013
 deleteAndcreateKeychain.sh	More files added
 diagnostics.sh	fixed awk

Kyle Brockman - University of Wisconsin-Milwaukee

scripts / UW-Milwaukee / ⌂

 darklordbrock Added a check for if the drive is already encrypted

Name	Last commit message
...	
30minAdminJss.sh	Added temporary admin scripts
30minAdminJssRemoved.sh	Added temporary admin scripts
mySWUcheck.sh	Add the software update logout script
timeMachineSetup.sh	Added a check for if the drive is already encrypted

“Temp Admin” - munki Self Service

The screenshot shows a dark-themed software interface titled "Managed Software Center". At the top left is a search bar containing the text "Temp". Below the search bar is a navigation menu with four items: "Software", "Categories", "My Items", and "Updates". The main content area displays the results of a search for "temp". The results include a card for "Temporary Admin Access" from "SelfService - Computing Techn...". This card features a circular icon with "30 MIN" and an "INSTALL" button. Below the search results, there is a horizontal navigation bar with links: Communication, Developer, Education, Education & Research, Multimedia, Network Utilities, Productivity, SelfService, and Uncategorized.

Managed Software Center

Communication | Developer | Education | Education & Research | Multimedia | Network Utilities | Productivity | SelfService | Uncategorized

Search results for temp

Temporary Admin Access
SelfService - Computing Techn...

30 MIN

INSTALL

Privileges - SAP (Rich Trouton)

The screenshot shows a GitHub repository page for 'Privileges' by SAP. The repository URL is github.com/SAP/macOS-enterprise-privileges. The main page features a large yellow lock icon on the left and the word 'PRIVILEGES' in white capital letters on the right. Below this, the word 'Privileges' is displayed in a large, bold, white font. A green button labeled 'REUSE compliant' is visible. The repository has four main files listed: 'README', 'Code of conduct', 'Apache-2.0 license', and 'Security'. The 'README' file is underlined, indicating it is the current page.

github.com/SAP/macOS-enterprise-privileges

README Code of conduct Apache-2.0 license Security

PRIVILEGES

Privileges

REUSE compliant

Privileges for macOS is designed to allow users to work as a standard user for day-to-day use, by providing a quick and easy way to get administrator rights when needed. When you do need admin rights, you can get them by clicking on the Privileges icon in your Dock.

Principle of Least Privilege

DATE(S) ISSUED:

02/28/2024

SUBJECT:

Multiple Vulnerabilities in Google Chrome Could Allow for Arbitrary Code Execution

OVERVIEW:

Multiple vulnerabilities have been discovered in Google Chrome, which could allow for arbitrary code execution. Successful exploitation of these vulnerabilities could allow for arbitrary code execution in the context of the logged on user. Depending on the privileges associated with the user an attacker could then install programs; view, change, or delete data; or create new accounts with full user rights. Users whose accounts are configured to have fewer user rights on the system could be less impacted than those who operate with administrative user rights.

THREAT INTELLIGENCE:

There are currently no reports of these vulnerabilities being exploited in the wild.

SYSTEMS AFFECTED:

- Chrome prior to 122.0.6261.94/.95 for Windows
- Chrome prior to 122.0.6261.94 for Mac and Linux

Principle of Least Privilege

RECOMMENDATIONS:

We recommend the following actions be taken:

- Apply appropriate updates provided by Google to vulnerable systems immediately after appropriate testing.
(M1051: Update Software)
 - **Safeguard 7.1: Establish and Maintain a Vulnerability Management Process:** Establish and maintain a documented vulnerability management process for enterprise assets. Review and update documentation annually, or when significant enterprise changes occur that could impact this Safeguard.
 - **Safeguard 7.4: Perform Automated Application Patch Management:** Perform application updates on enterprise assets through automated patch management on a monthly, or more frequent, basis.
 - **Safeguard 7.7: Remediate Detected Vulnerabilities:** Remediate detected vulnerabilities in software through processes and tooling on a monthly, or more frequent, basis, based on the remediation process.
 - **Safeguard 9.1: Ensure Use of Only Fully Supported Browsers and Email Clients:** Ensure only fully supported browsers and email clients are allowed to execute in the enterprise, only using the latest version of browsers and email clients provided through the vendor.

Principle of Least Privilege

- Apply the Principle of Least Privilege to all systems and services. Run all software as a non-privileged user (one without administrative privileges) to diminish the effects of a successful attack. ([M1026: Privileged Account Management](#))
 - **Safeguard 4.7: Manage Default Accounts on Enterprise Assets and Software:** Manage default accounts on enterprise assets and software, such as root, administrator, and other pre-configured vendor accounts. Example implementations can include: disabling default accounts or making them unusable.
 - **Safeguard 5.4: Restrict Administrator Privileges to Dedicated Administrator Accounts:** Restrict administrator privileges to dedicated administrator accounts on enterprise assets. Conduct general computing activities, such as internet browsing, email, and productivity suite use, from the user's primary, non-privileged account.

Most Coalitions Built Through Simple Handshake Agreements - No Red Tape



Rebuilding Departmental Coalitions

- Sometime in 2015 there was an IT personnel change in the prior department and I started to rebuild the relationship.
- The department in question was interested in testing out our munki solution.
- We started on boarding the macOS devices into our munki environment.
- That specific departmental relationship has flourished and we now have 414 of their macOS devices in our munki repo.

Tools To Assist In Building A Coalition

- Provide enterprise Apple services and solutions to augment existing departmental capabilities.
- Self improvement via inservice trainings related to Apple IT.
- Gaining additional skills via various IT certifications.
- Find an Apple IT member to mentor or apprentice under.
- Possibly attaining a higher education degree (i.e., bachelors, masters, doctoral).





Mac Admins

macadmins.slack.com

Plan type

Pro

Date created

May 12th, 2015

- Established on May 12, 2015.
- I joined on August 11, 2015.



MAC ADMINS FOUNDATION

[News](#)[Slack](#)[Foundation](#)[Donate](#)[Store](#)

The Mac Admins Slack is a service provided by the Mac Admins Foundation, a 501(c)3 non-profit organization, for the betterment of the Mac Admins Community.

By requesting an invitation to The Mac Admins Slack workspace, you agree to abide by our [Code of Conduct](#).

[JOIN SLACK NOW](#)

Already a member of the Mac Admins Slack? [Sign in here](#).

Visit the [Mac Admins Github](#) for community projects.

Membership

68,380

Total ↑668 (+1%) ▾

65,737

Claimed ↑646 (+1%) ▾

9,491

Monthly active ↑89 (+1%) ▾

autopkg



Get Notifications for @ Mentions ▾

About Members 4,755 Integrations Settings

adobe



Get Notifications for @ Mentions ▾

Huddle ▾

About Members 3,870 Integrations Settings

jamfnation



Get Notifications for @ Mentions ▾

About Members 18k Integrations Settings

microsoft-office-365



Get Notifications for @ Mentions ▾

Huddle ▾

About Members 3,566 Integrations Settings

mosyle



Get Notifications for @ Mentions ▾

About Members 3,156 Integrations Settings

munki



Get Notifications for @ Mentions ▾

About Members 4,896 Integrations Settings

Searching In MacAdmins Slack Community

← → ⌘ office-reset.com/macadmins/

Office-Reset

Designed to troubleshoot and fix Microsoft Office for Mac errors

Overview Frequently Asked Questions Examples For Mac Admins

Welcome Mac Admins!

The Office-Reset tool was designed to work in both consumer and commercial environments. At its most basic level, Office-Reset is simply a collection of payload-less packages that run a series of Terminal commands via zsh. All of these are wrapped into a distribution package which is both signed and notarized.

Searching In MacAdmins Slack Community

- Version 1.9.1 is split apart into separate package installers.

Downloads - v1.9.1

-  Factory Reset Package
-  Complete Removal Package
-  Word Reset Package
-  Excel Reset Package
-  PowerPoint Reset Package
-  Outlook Reset Package
-  Outlook Data Removal Package
-  OneNote Reset Package
-  OneDrive Reset Package
-  Teams Reset Package
-  Skype For Business Removal Package
-  AutoUpdate Reset Package
-  License Reset Package
-  Zoom Outlook Plugin Removal Package
-  WebEx Tools Removal Package

Searching In MacAdmins Slack Community

- Version 2.0 Beta 1 is not split apart into separate package installers.



Searching In MacAdmins Slack Community

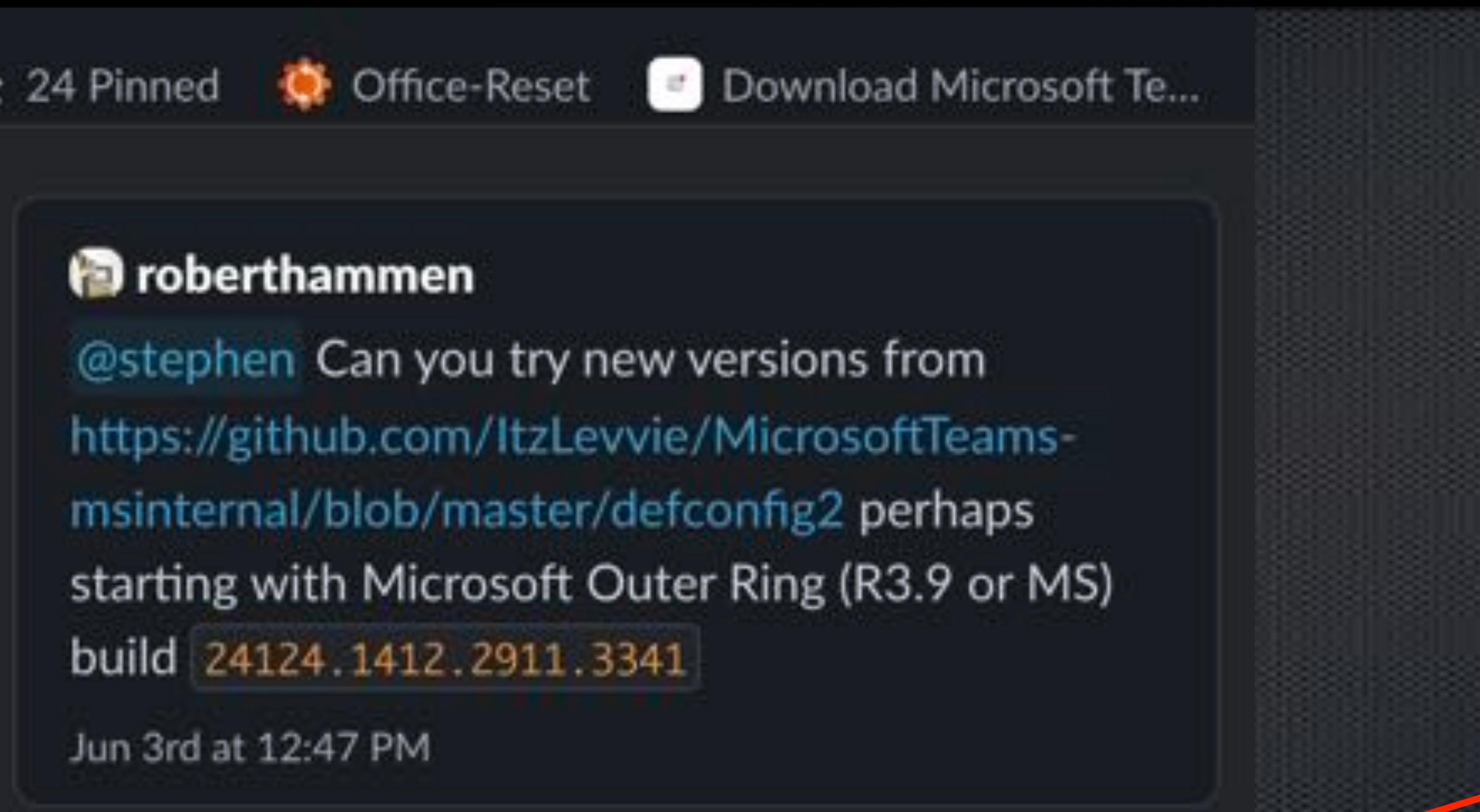
Q Search Mac Admins

microsoft-teams Discussion related to Microsoft Teams | <https://docs.microso...> 2,240

24 Pinned Office-Reset Download Microsoft Te... A deep dive of the new ... Announcing general ava... ...

Look for the pinned items and check there first prior to posting.

Searching In MacAdmins Slack Community



A screenshot of a Slack message from user **roberthammen** to **@stephen**. The message suggests trying new versions of Microsoft Teams from a GitHub repository: <https://github.com/ItzLevvie/MicrosoftTeams-msinternal/blob/master/defconfig2>. It also mentions starting with Microsoft Outer Ring (R3.9 or MS) build [24124.1412.2911.3341](#). The message was posted on June 3rd at 12:47 PM.

roberthammen @stephen Can you try new versions from <https://github.com/ItzLevvie/MicrosoftTeams-msinternal/blob/master/defconfig2> perhaps starting with Microsoft Outer Ring (R3.9 or MS) build [24124.1412.2911.3341](#)

Jun 3rd at 12:47 PM

Office-Reset [Download Microsoft Te...](#)

Tony Young

Classic Teams Timelines for end of support and end of availability.

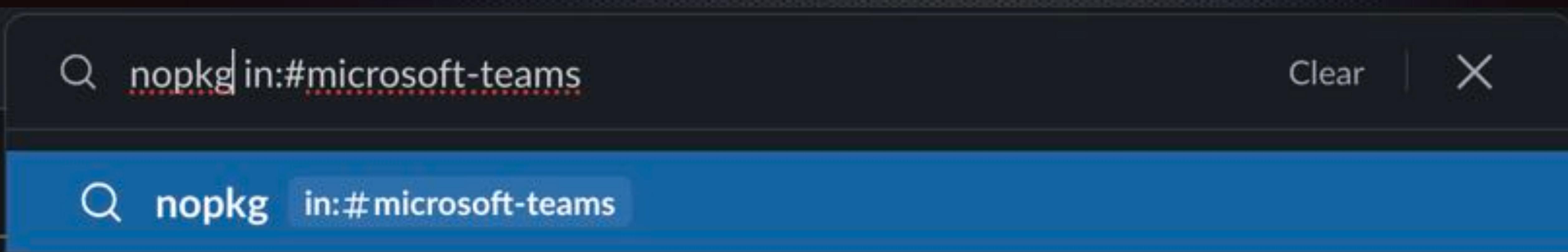
Published April 23, 2024

Links included in the posting:

- New Teams web app on [supported browsers](#)
- End of availability details can be found here: [End of availability for classic Teams client](#).
- The prerequisites for new Teams can be found [here](#).
- For users in your organization with IT policies blocking app [installation](#) or who do not have local install permissions, are missing [WebView2](#), or have other firewall issues that are preventing app installation, we strongly recommend mitigating these issues or leveraging deployment options such as [bulk deployment](#) to prevent any work stoppage for your users.

(edited)

Searching In MacAdmins Slack Community



- Search Term: **nopkg**
- Where To Search: **in:#microsoft-teams**

Searching In MacAdmins Slack Community

Messages 4 Lists 0 Canvases 0 Files 0 Channels 0 People 0

From: Only my channels Exclude automations

microsoft-teams

 arDis Apr 23rd at 6:47 AM
Thanks for reminding this... In the ancient times before mdm only approved profiles I used to run it ...
`makepkginfo --name $PKG_NAME --displayname $PKG_NAME --nopkg --pkgvers=$VERSION --installcheck_script=$PKG_NAME-install_check.sh ...`

microsoft-teams

 patgmac Apr 22nd at 10:02 AM
I still have this in my shell history. `makepkginfo --nopkg --name=Microsoft_Teams_Reset --pkgvers=2.0 --postinstall_script=/path/to/script.sh > ... Show more`

 2 

Searching In MacAdmins Slack Community

Thread #microsoft-teams

patgmac 3 months ago

Don't need munkipkg for this, it's a nopkg.

patgmac 3 months ago

The MS reset pkg is just a bunch of scripts and uses installerchoices to target that script.

9P 1

6+

rtrouton 3 months ago

I did the same thing (open the beta and extract `postinstall` script) for an earlier request for my folks for an updated Teams Reset.

patgmac 3 months ago

```
I still have this in my shell history. makepkginfo --nopkg --name=Microsoft_Teams_Reset --pkgvers=2.0 --  
postinstall_script=/path/to/script.sh >  
~/src/munki_autopkg/munki_repo/pkginfo/apps/Microsoft/Microsoft_Teams_Reset-2.0.pkginfo
```

1 2

6+

swy 3 months ago

You rule. I was just digging through the wiki to recall how specifically to run that. Been a bit.

jamf Nation

A screenshot of a web browser displaying the jamf Nation website at community.jamf.com. The page features a dark header with the jamf logo and the word "Nation". Below the header, a large banner reads "Building relationships to facilitate learning." followed by "Thanks for joining us!". A stats section shows "290K Posts | 7,702 Solutions". At the bottom is a search bar with the placeholder "Search all community".

community.jamf.com

jamf Nation

Help

Building relationships to facilitate learning.

Thanks for joining us!

290K Posts | 7,702 Solutions

Search all community

<https://community.jamf.com>



2016 - Apple School Manager (ASM)

Apple School Manager (ASM)

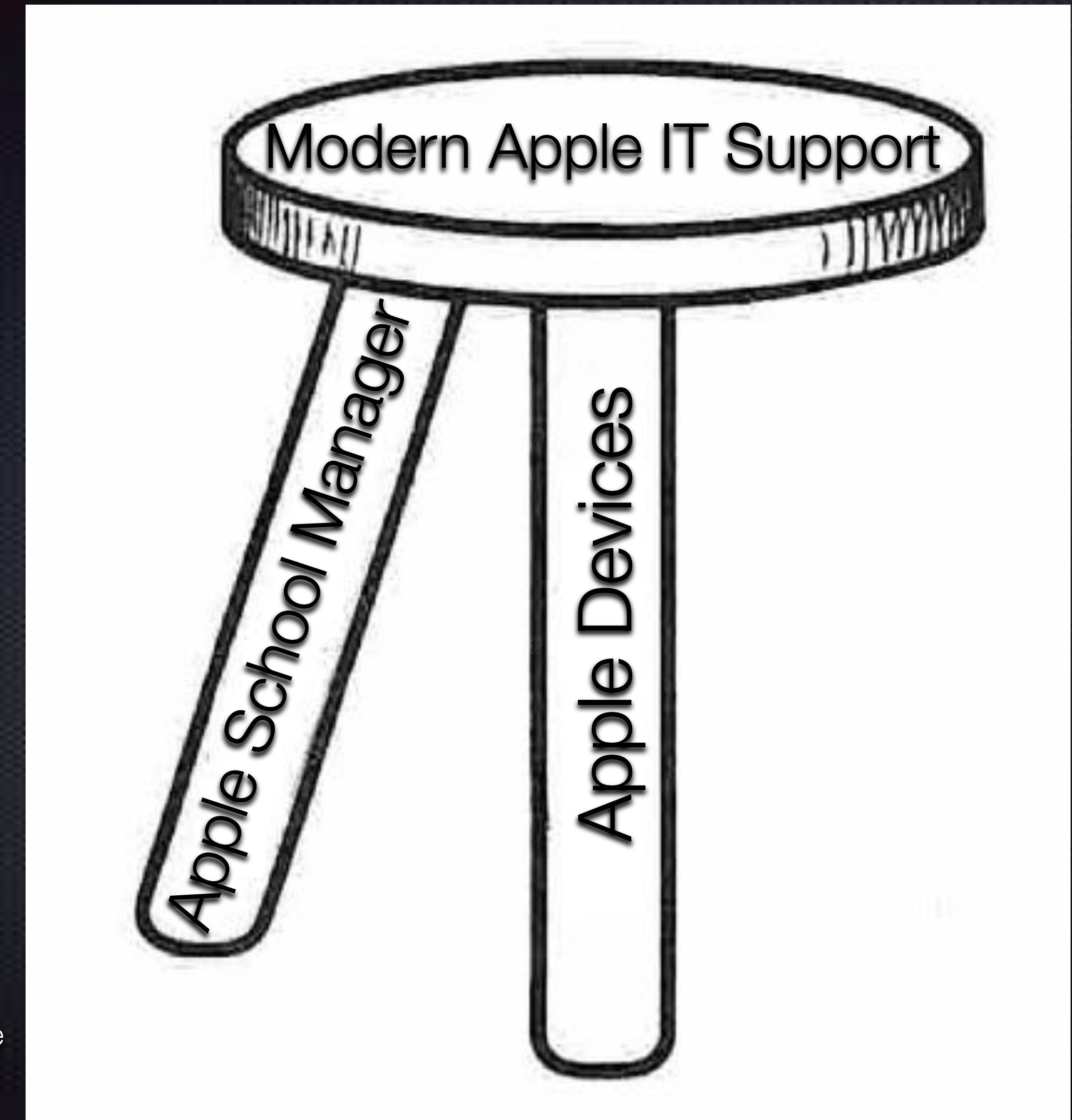
- Apple initially set up our ASM portal without central IT involvement.
- Apple architected our ASM portal to primarily function with a single department that they had sold hundreds of iPads.
- Apple kept making advancements with MDM while we were stuck still using VPP vouchers and redemption codes.

What Happens When You Have A Service Void Or Vacuum?



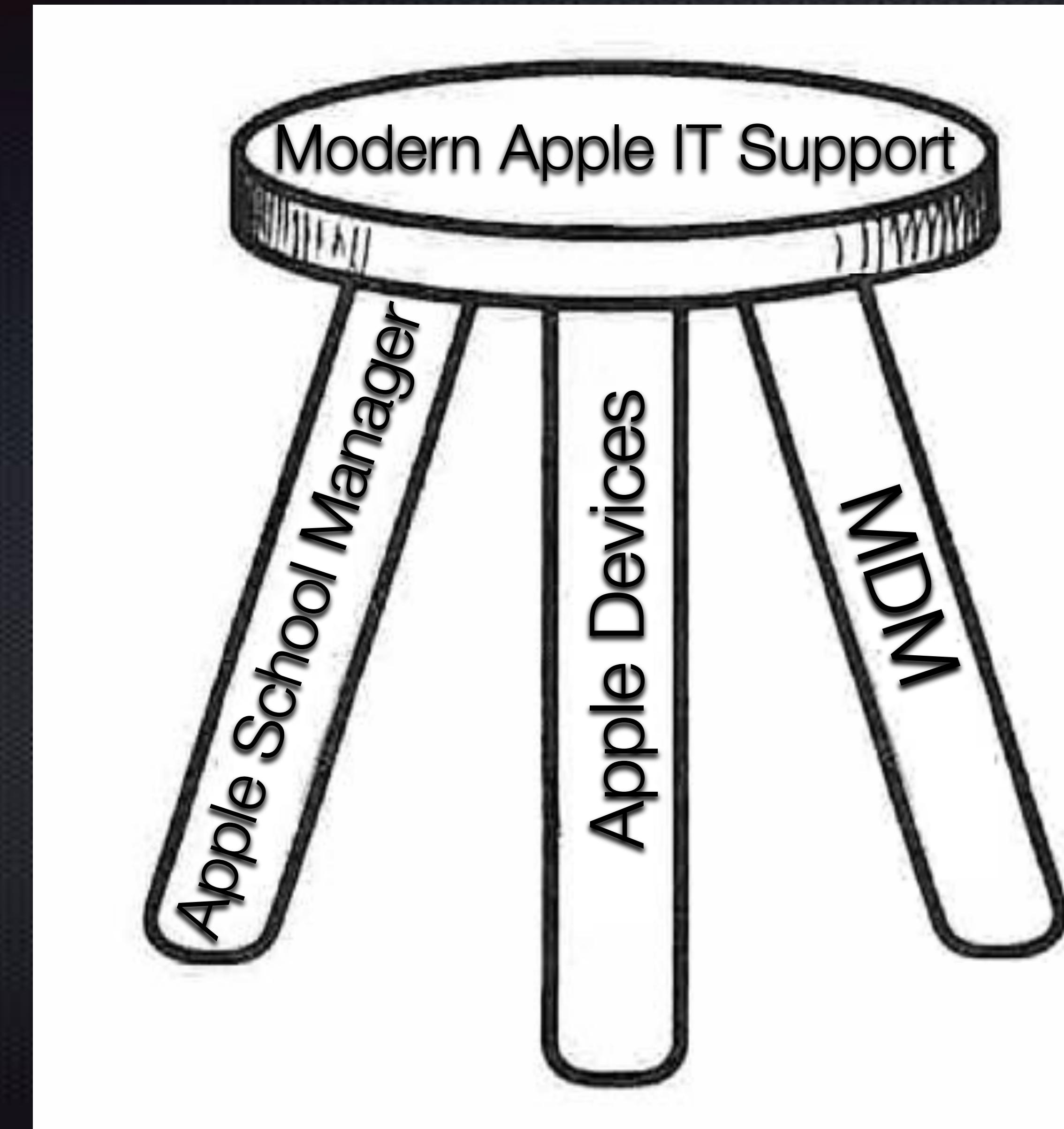
We Had No Central MDM Service Offering

Modern Apple IT Support - The Two Legged Stool Condition*



*The Two Legged Stool Condition may cause the following symptoms - frustration, anxiety, loss of control, lack of device management, etc.

Modern Apple IT Support - The Two Legged Stool Condition



You get an ASM portal...And you get an ASM portal...



Look under your seat...Everyone gets an ASM portal!



But Wait...

THERE'S

MORE!

The text "But Wait..." is in blue, stylized, bubbly letters. "THERE'S" and "MORE!" are in large, bold, red letters with a yellow outline.

You get an MDM...And you get an MDM...



Look under your seat...Everyone gets an MDM!

ASM > MDM Server Assignment > Customer Numbers

The screenshot shows the Apple School Manager (ASM) interface. On the left, there's a sidebar with icons for School, Activity, Locations, Users, Classes, Access Management, and Account Requests. The main area has a header with 'My Profile', a search icon, and 'Add MDM Server'. Below this, there are sections for 'Organization Information' (with an info icon), 'Organization Settings' (with a gear icon), 'Payments and Billing' (with a credit card icon), and 'Managed Apple IDs' (with an apple icon). To the right, there's a large button labeled 'MDM Server Assignment' with a tablet icon. A red box highlights the 'Customer Numbers' section, which contains the text: 'These numbers are assigned by Apple to your organization and your Apple Authorized Reseller, and are associated with your purchases of Apple hardware.' It also shows a green dot next to '19 Active' and an 'Edit' link.

Customer Numbers Edit

These numbers are assigned by Apple to your organization and your Apple Authorized Reseller, and are associated with your purchases of Apple hardware.

● 19 Active

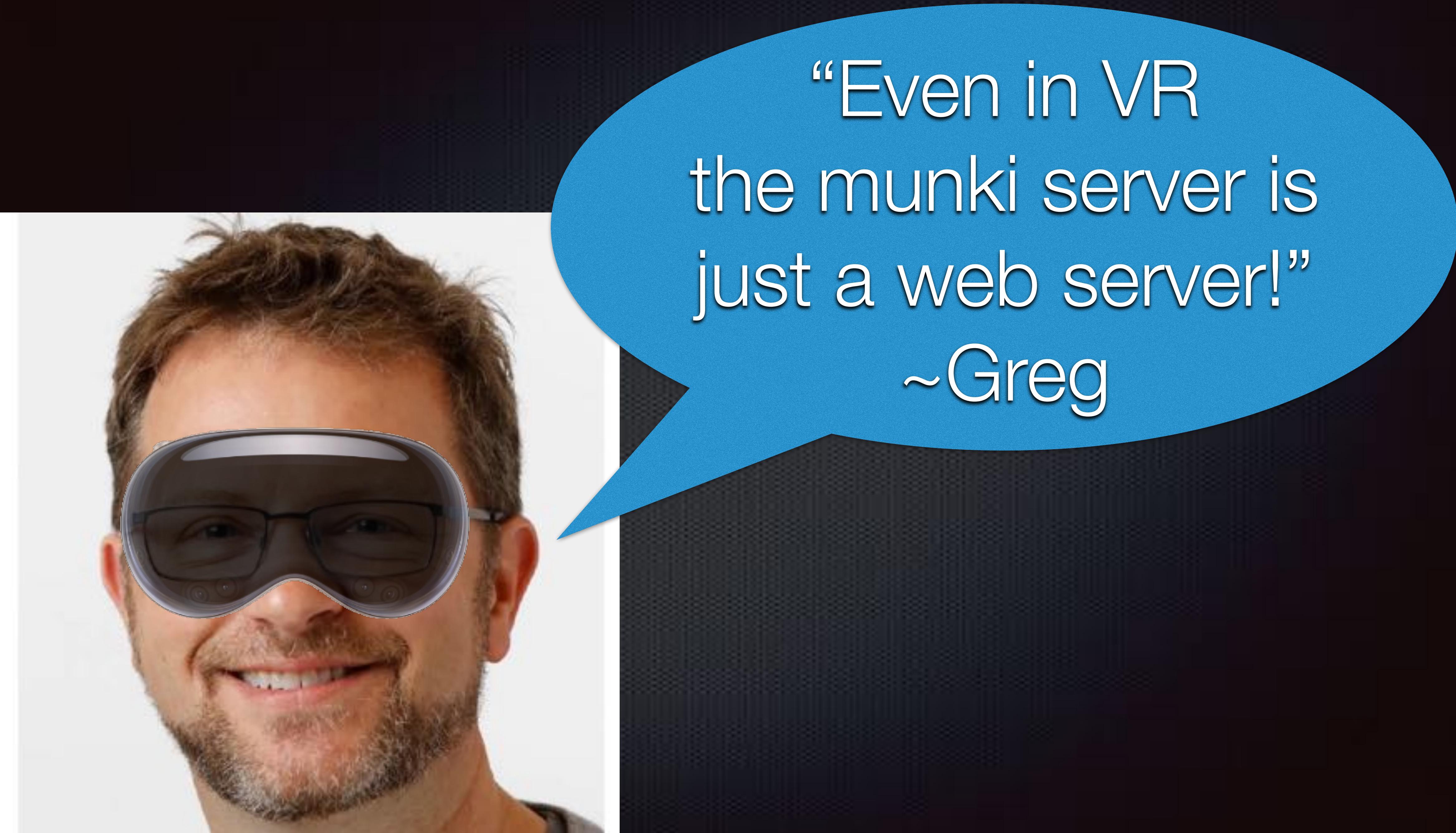
Ask Apple for a database dump of “Customer Numbers” associated with your university/company

Another Approach To Building Departmental Coalitions

- Our technicians would move up and over to other departments on campus.
- Other IT personnel would move between departments and request to use our enterprise Apple services in their new department.
- IT directors might leave the university and then central IT would assist the various departments and provide resources and services.

Next Major Shift (2019-2020)

- Just prior to the pandemic we transitioned our munki environment to new hardware.
- Prior to this our munki environment was walled off from the outside world and required off-campus macOS devices to connect via our VPN environment to get updates.
- We moved our munki instance to Microsoft IIS and it works.
 - Remember to address mime types. :-)

A portrait of a man with brown hair and a beard, wearing dark VR goggles. He is smiling and looking towards the camera. A large blue speech bubble originates from his mouth, containing the text of the quote.

“Even in VR
the munki server is
just a web server!”
~Greg

jamf - File Share Distribution Points

The screenshot shows a web browser displaying the Jamf Pro documentation. The URL in the address bar is docs.jamf.com/10.35.0/jamf-pro/install-guide-mac/File_Share_Distribution_Points.html. The page title is "File Share Distribution Points". The left sidebar contains navigation links for the "Jamf PRO" section, including "Preface", "Overview of Technologies", "Installation", "Setup", "Database Management", "Server Infrastructure", and "About Distribution Points". The main content area includes a sub-header "For related information, see the following articles:" followed by three bullet points:

- [Configuring Red Hat Enterprise Linux 7.6 for SMB/HTTPS File Share Distribution with Jamf Pro](#)
Find out how to use Samba to set up a file share distribution point with an SMB share on a Linux server.
- [Using Apache HTTP Server to Enable HTTP Downloads on a Linux File Share Distribution Point](#)
Find out how to use Apache HTTP Server to enable HTTP downloads on a Linux file share distribution point.
- [Using IIS to Enable HTTPS Downloads on a Windows Server 2016 or 2019 File Share Distribution Point](#)
Find out how to activate Internet Information Services (IIS) and use it to enable HTTPS downloads on a Windows Server 2016 or 2019 file share distribution point.

https://docs.jamf.com/10.35.0/jamf-pro/install-guide-mac/File_Share_Distribution_Points.html

Make That Cat Walk Backwards



Munki - Reverting or Downgrading Software



USING MUNKI TO REVERT OR DOWNGRADE SOFTWARE

March 15, 2018 | GregW

INTRODUCTION

It might come as little surprise to find out that I use [Munki](#) in my organization to manage software installations on macOS.

Munki is really good at keeping software up-to-date. Every time it runs, it compares the versions it has on the server against the versions installed on the local machine and updates any software at a lower version than it has on the server.

Its default behavior when an item on the local machine has a *higher* version than that on the server is to leave it alone. This is great when you have users that for whatever reason need to test newer versions (or perhaps they are actually *developing* the newer version of the software).

macOS 14.4 Bundle Packages Deprecation Warning



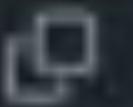
vmiller commented on Mar 19 • edited

...

macOS 14.4 has added a deprecation warning when installing bundle packages. Adobe admin console packages are an example of this.

When using munkiimport to import a package like this on a macOS 14.4 system the RestartAction key gets set to the text of the deprecation warning :

```
<key>RestartAction</key>
<string>installer: [DEPRECATION WARNING] — Legacy Installer Package
installer: This package will be incompatible with a future version of macOS. Contact the developer for support
None</string>
```



I've reproduced this with munki 6.4.2.4634 and 6.5.0.4652

Scan Your Munki Repo For Bundle Packages

The screenshot shows a GitHub repository page for 'macadmin-scripts'. The repository is public and has 1 branch and 0 tags. The main branch is 'main'. The repository has 76 commits. A specific commit for 'munki_bundle_pkg_finder.py' is highlighted with a red border.

File / Commit Message	Author	Date
docs	gregneagle	updated docs
.gitignore	gregneagle	Add more items to .gitignore; update README for more...
LICENSE.md	gregneagle	First commit
README.md	gregneagle	Update README.md
getmacosipsws.py	gregneagle	Change shebang to #!/usr/bin/env python in prep for m...
installinstallmacos.py	gregneagle	Add default catalog URL for Sonoma
munki_bundle_pkg_finder.py	gregneagle	Add munki_bundle_pkg_finder script

Scan Your Munki Repo For Bundle Packages

Found 13 items with bundle-style pkgs.

- Option 1:
 - Set the maximum OS in pkginfo files to 14.99
- Option 2:
 - Delete items if not needed

Client Activity

● Active ● Inactive



Total Clients: 5382 | Clients per hour: 13800

New Clients

Mosh's MacBook Pro	an hour ago
MacBook Air van Titus	an hour ago
Hans's MacBook Pro	3 hours ago
Zhangxin's MacBook Pro	6 hours ago
MacBook Pro van Max	10 hours ago

Munki

50
Errors

250
Warnings

Events

- ⚠ panitas | 3 Munki warnings 2 minutes ago
- ⚠ MacBook Pro van Peczenah | 2 Munki warnings 3 minutes ago
- ⚠ Ruud Elzerman's MacBook Air | 2 Munki warnings 3 minutes ago
- ⚠ MacBook Air van Anniek | Munki warning: Download of ATLAS-S license failed: HTTP result 403: forbidden 4 minutes ago
- ⚠ MacBook Air van Jeyson | Munki error: Could not retrieve managed install primary manifest. 4 minutes ago
- ⚠ Fiona's MacBook Air | Munki warning: Download of ATLAS-S license failed: HTTP result 403: forbidden 4 minutes ago
- ⚠ MacBook Air van Desirée | Munki warning: Download of uncheckin.xsl license failed: HTTP result 403: forbidden 5 minutes ago

Pending Apple Updates

Security Update 2018-006 10.13.6
Retina 12.0.1
iTunes 12.8
Security Update 2018-004 10.13.6
Security Update 2018-004 10.11.6

Free Disk Space

411
+508

801
+380

5744
+605

Pending installs

Microsoft Word for Mac 16.16.18111001
Microsoft Excel for Mac 16.16.18111001
Microsoft Outlook for Mac 16.16.18111001
Google Chrome 70.0.3598.110
Microsoft PowerPoint for Mac 16.16.18111001

Uptime

3131
+7 days

1849
+7 days

1573
+1 day

MunkiReport

- Finally established our portal in December 2020 on RHEL.
- Single best IT decision I've made in the past 24 years.
- Delegated access to participating departments.
- Created a “scavenger hunt” training session to increase the delegated IT members use and understanding of how to locate the data.



MunkiReport - Growth Over Time



Currently 1,982 enrolled macOS devices

Departments On Boarded Since 2013

Alumni	Computing Technology Support	Network Communication Technologies
Budget Office	Dean of Students	Opening Nights - Performing Arts
Campus Recreation	Dedman College of Hospitality	Panama City College
Center for Academic Retention & Enhancement	Enterprise Applications	Pepper Institute
Center for Global Engagement	Enrollment Management Technologies	Presidents Office
Center for Leadership & Social Change	Enterprise Resource Planning	Provost Office
Chemistry	Faculty Development & Advancement	Psychology
College of Arts & Sciences	Florida Center for Reading Research	Scientific Computing
College of Business	FSU Veterans Center	Student Affairs Marketing
College of Communication & Information	Governmental Relations	Student Government
College of Criminology & Criminal Justice	Graduate School	Student Union
College of Education, Health & Human Sciences	Information Security & Privacy Office	Technology Enhanced Classrooms
College of Engineering	Information Services	Undergraduate Studies
College of Fine Arts	Information Technology Services	University Communication
College of Law	Infrastructure & Operations Support	University Housing
College of Motion Picture Arts	International Programs	University Marketing
College of Music	Jim Moran Center	University Relations
College of Social Work	Learning Systems Institute	University Technology Administration
		Vice President Student Affairs

2021 - The Year of MDM

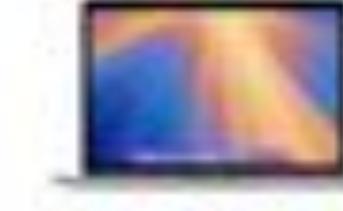
- Previously had been deploying profiles to macOS devices via munki.
 - No central MDM solution for iOS.
- January 2021 we selected Mosyle as our central MDM solution.
- April 2021 we started enrolling Apple devices into our Mosyle MDM environment.

Mosyle - Growth Over Time

Enrolled Devices & Licenses

 Premium subscription until 02/07/2025 (217 days left)

2610 licenses used of 2650 available

 410 iOS / iPadOS	 2200 macOS	 3 tvOS	 0 visionOS
---------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------

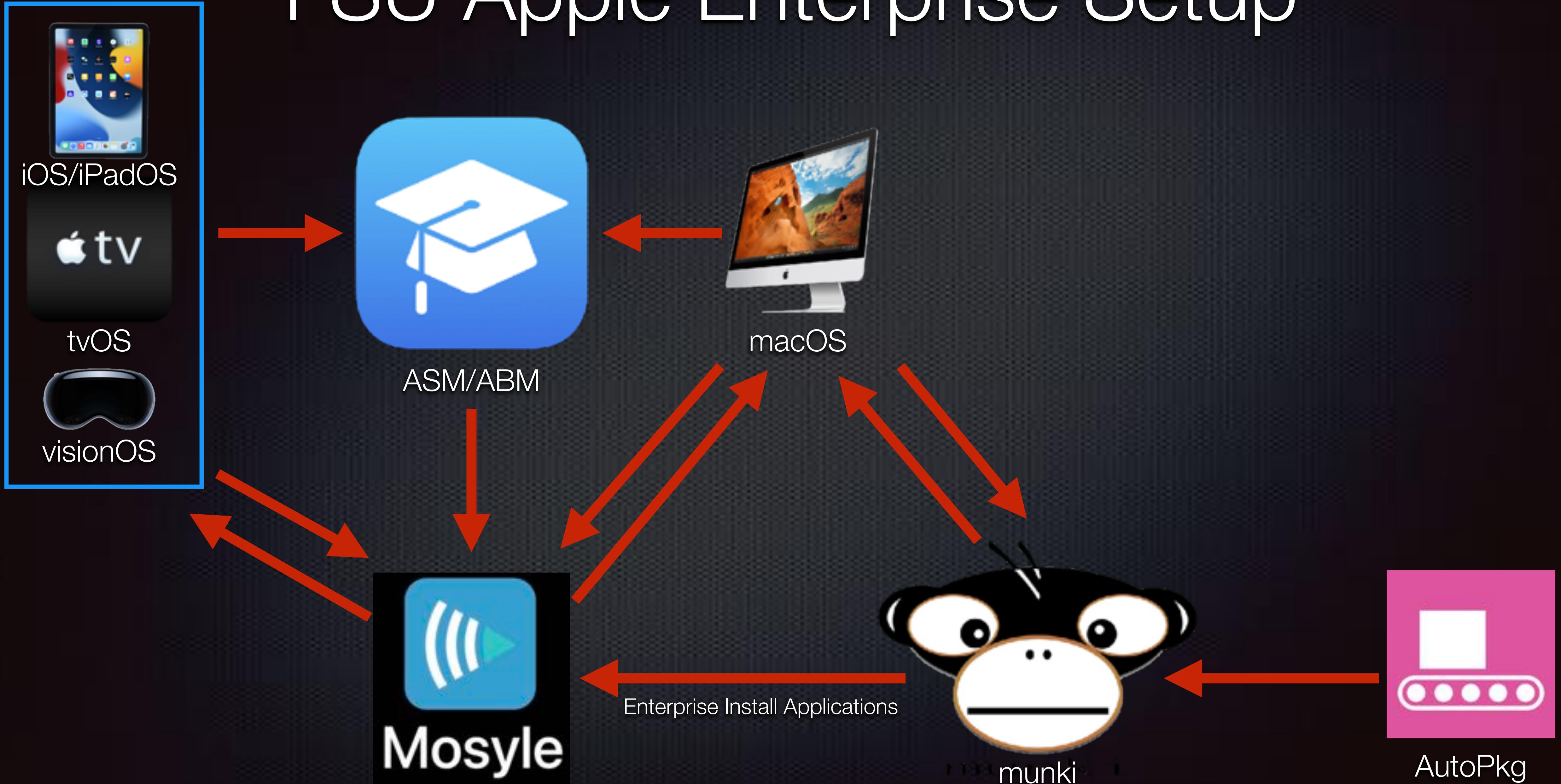
Currently **2,610** enrolled Apple devices since 04/01/2021.

Number of Apple Devices Purchased

Year	Number of Apple Devices Purchased
2017	882
2018	875
2019	783
2020	728
2021	1,142
2022	1,346
2023	1,110
2024	1,210*

*Currently on pace to acquire 1,210 in 2024

FSU Apple Enterprise Setup



Remember When I Said Don't Attempt This?



Resistance is futile. You will be assimilated.



2024 - Welcome To The Present

- In February 2024 we had an IT event occur.
- The IT event didn't impact any macOS devices.
- CrowdStrike to the rescue.

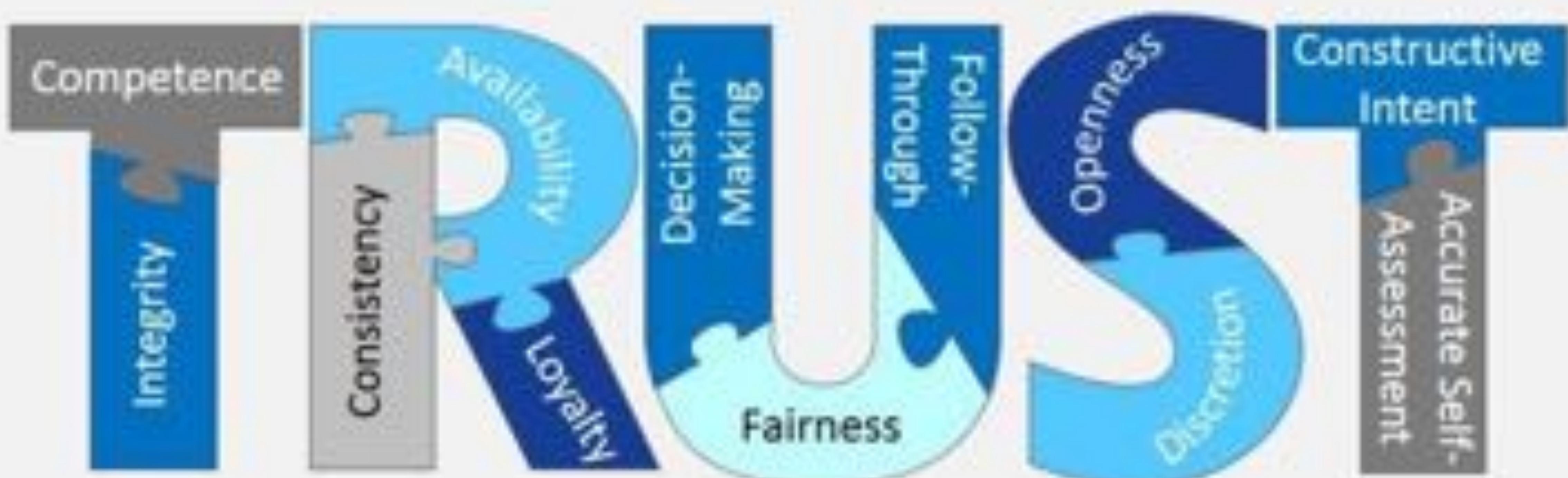
Exceptions To The “Borg” Approach

- You might be able to use this approach “if” you are the president or vice president of your university or corporation.
- Are there any presidents or vice presidents present in the room today?

2024 - Present & Future

- Our Provost recently announced a move towards consolidation of IT positions into the central IT department.
- This initiative aims to position the university towards a more secure and sustainable technology environment while aligning our investments and overall campus strategy.

How To Build Trust



2024 - Present & Future

- This announcement will greatly speed up the on boarding process.
- Central IT will have to quickly build trust with additional departments.

List of Tools That We Have Used

AutoPkg

AutoPkgR

FSMonitor

MIST (macOS Installer Super Tool)

Munki

munki-facts

munki-pkg

MunkiAdmin

MunkiReport

Munki PrinterGenerator

NoMAD

Outset

Pacifist

Packages (WhiteBox)

Payload-Free Package Creator

ProfileCreator

Recipe Robot

Script2Pkg

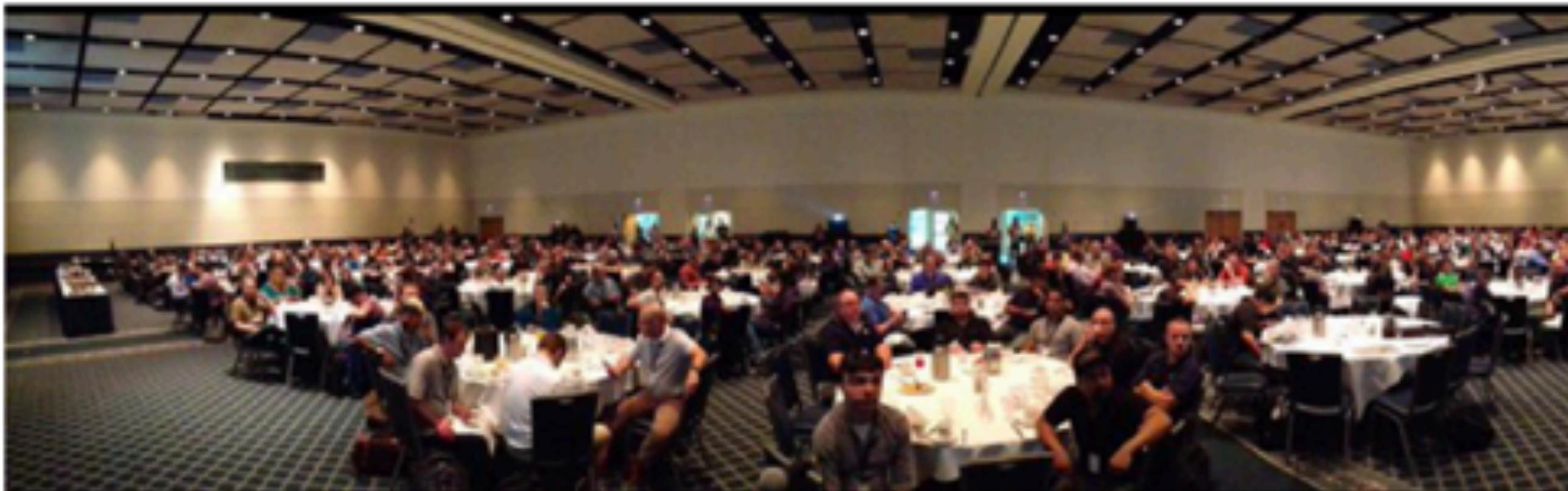
Suspicious Package

swiftDialog

PSU MacAdmins Conference Resources

macadmins.psu.edu/conference/resources/

MacAdmins Conference



About Attendees Speakers Sponsorships Code Of Conduct Health and Safety

Resources

MacAdmins Conference Resources

Below are links to slides and videos from our most recent conference. Slides are posted the week after the conference (depending on speaker's preference). Videos will be posted a few weeks after the conference concludes. For content from previous conferences, visit our [Resources Archive](#).

PSU MacAdmins Conference Resources Archive

 macadmins.psu.edu/resources-archive/

Resources Archive

2022 Campfire Sessions Conference Sessions

- [Abusing scripts in apps on macOS](#) by Thomas Reed (Video)
- [Beta testing and preparing your organization](#) by Apple Education* (Video)
- [Create a Build and Deployment Pipeline for your iOS Apps with Amazon EC2 Mac Instances](#) by Sebastien Stormacq (Video)
- [The Commonality of Internships and Tapas: Introducing others to new things](#) by Ben Bass and Joe Scalone (Video)
- [Demystifying JamfUploader: Taking your Jamf-AutoPkg workflows to the next level](#) by Anthony Reimer and Graham Pugh (Video)
- [From Apple Genius to IT Pro](#) by Hamlin Krewson (Video)

Rich Trouton - GitHub Scripts

The screenshot shows a GitHub repository page for the user `rtrouton` with the repository name `rtrouton_scripts`. The repository is public and has 242 watchers. It contains 1 branch and 0 tags. The main branch is `main`. The repository has 756 commits. The most recent commit is `Update Jamf_Pro_Dock_Items.Download.sh`, made by `rtrouton` 2 months ago. Other commits include `Adding .gitignore`, `Adding MIT license to scripts repo`, and `Updated README.`. The repository description states: "These are scripts that I'm posting for other folks to use."

github.com/rtrouton/rtrouton_scripts

rtrouton / rtrouton_scripts

Type ⌘ to search

Code Issues 3 Pull requests 3 Actions Projects Wiki Security Insights

rtrouton_scripts Public Watch 242

main 1 Branch 0 Tags Go to file + Code

rtrouton Update Jamf_Pro_Dock_Items.Download.sh 0fe9372 · 2 months ago 756 Commits

rtrouton_scripts Update Jamf_Pro_Dock_Items.Download.sh 2 months ago

.gitignore Adding .gitignore 13 years ago

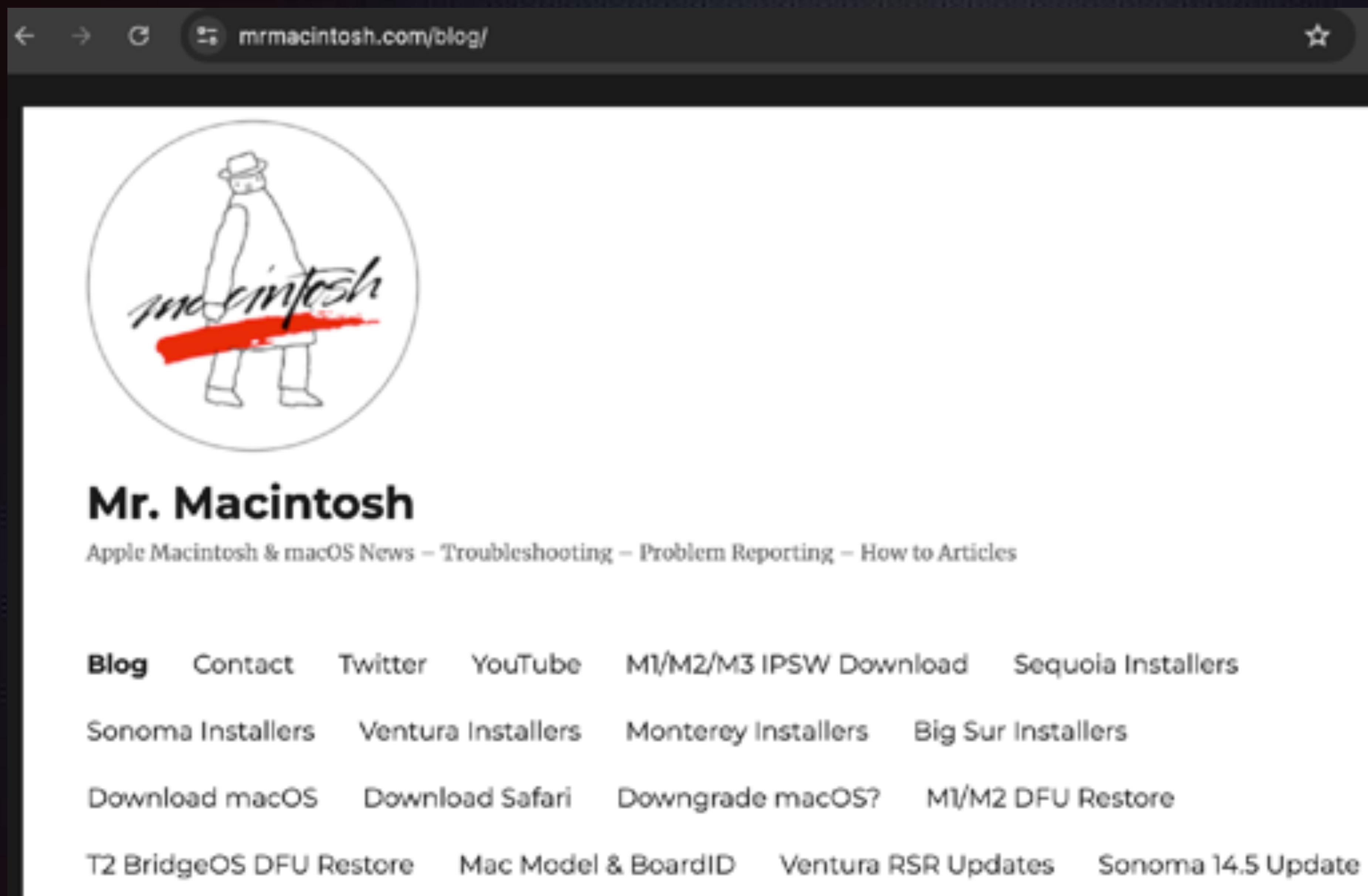
LICENSE Adding MIT license to scripts repo 11 years ago

README Updated README. 13 years ago

README MIT license

These are scripts that I'm posting for other folks to use.

Mr. Macintosh Blog



The screenshot shows a web browser window displaying the Mr. Macintosh Blog website at mrmacintosh.com/blog/. The page features a large circular logo on the left containing a cartoon character wearing a hat and holding a red brush over the word "macintosh". Below the logo, the text "Mr. Macintosh" is displayed in a bold, sans-serif font. A horizontal line of smaller text follows: "Apple Macintosh & macOS News – Troubleshooting – Problem Reporting – How to Articles". At the bottom of the page is a navigation menu with links to various resources, including "Blog", "Contact", "Twitter", "YouTube", "M1/M2/M3 IPSW Download", "Sequoia Installers", "Sonoma Installers", "Ventura Installers", "Monterey Installers", "Big Sur Installers", "Download macOS", "Download Safari", "Downgrade macOS?", "M1/M2 DFU Restore", "T2 BridgeOS DFU Restore", "Mac Model & BoardID", "Ventura RSR Updates", and "Sonoma 14.5 Update".

mrmacintosh.com/blog/

Mr. Macintosh

Apple Macintosh & macOS News – Troubleshooting – Problem Reporting – How to Articles

[Blog](#) [Contact](#) [Twitter](#) [YouTube](#) [M1/M2/M3 IPSW Download](#) [Sequoia Installers](#)

[Sonoma Installers](#) [Ventura Installers](#) [Monterey Installers](#) [Big Sur Installers](#)

[Download macOS](#) [Download Safari](#) [Downgrade macOS?](#) [M1/M2 DFU Restore](#)

[T2 BridgeOS DFU Restore](#) [Mac Model & BoardID](#) [Ventura RSR Updates](#) [Sonoma 14.5 Update](#)

“Don’t let the perfect
be the enemy
of the good.”

~ Voltaire

Start Where You Are



How Do You Know If You Are Going Forward?



Circular Reasoning Works Because



Know Your History





“Those who fail
to learn from history
are doomed to
repeat it.”

-Winston Churchill

Insanity:
DOING THE SAME THING
OVER AND OVER
..... ➤ **AGAIN** ➤

AND EXPECTING DIFFERENT
RESULTS

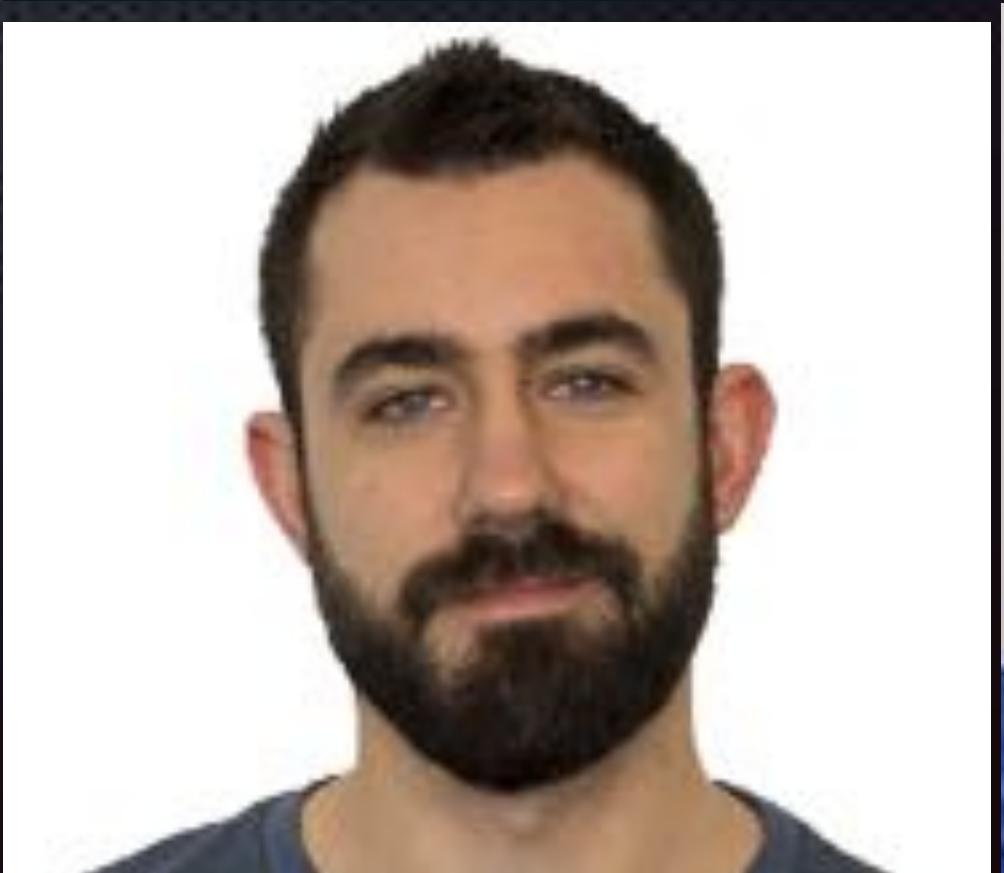
➤ ALBERT EINSTEIN ➤

Three Words People Are Afraid To Say

I don't

know

THE
JUDGE
WORLD
THE
COOLIE



Questions?



Feedback: <https://bit.ly/psumac-2024-57>

Resources: github.com/christopherhart/PSU2024